

**PART 234****GRAPHIC ARTS**

(Statutory authority: Environmental Conservation Law, §§ 3-0301, 19-0301, 19-0303.)

Sec.	Sec.
234.1 Applicability and compliance schedules	234.5 Prohibition of sale or specification
234.2 Definitions	234.6 Handling, storage, and disposal of volatile organic compounds (VOC)
234.3 Control requirements	
234.4 Testing, monitoring and recordkeeping	

**Historical Note**

Part (§§ 234.1-234.5) renum. Part 391, Title 9, filed Sept. 1971; new (§§ 234.1-234.5) filed April 10, 1981 eff. 30 days after filing.

**Section 234.1 Applicability and compliance schedules.** (a) The owner or operator of a packaging rotogravure, publication rotogravure, flexographic, offset lithographic or screen printing process at any facility which meets the current applicability criteria of this Part, must, when applying for a permit to construct or a certificate to operate required by Part 201 (Permits and Certificates) of this Title, include with the application for a permit to construct or certificate to operate, the method or methods which will be used to comply with the requirements of this Part.

(b) Any packaging rotogravure, publication rotogravure, flexographic, offset lithographic printing process or screen printing process at any facility located in the New York City metropolitan area, regardless of its annual potential to emit volatile organic compounds, must comply with this Part according to the following schedule:

(1) Any owner or operator of a packaging rotogravure, publication rotogravure, or flexographic printing process at any facility which was constructed on or before May 10, 1981 for which the annual potential to emit volatile organic compounds from all sources regardless of process type, but excluding combustion installations, at the facility equal or exceed 100 tons must have demonstrated compliance with this Part by July 1, 1982.

(2) Any owner or operator of a packaging rotogravure, publication rotogravure, or flexographic printing process at any facility which was constructed after May 10, 1981 for which the annual potential to emit volatile organic compounds from all sources regardless of process type, but excluding combustion installations, at the facility equal or exceed 100 tons must have demonstrated compliance with this Part upon start-up.

(3) Any owner or operator of a packaging rotogravure, publication rotogravure, or flexographic printing process at any facility which was constructed on or before September 1, 1988 for which the annual potential to emit volatile organic compounds from all sources regardless of process type, but excluding combustion installations, at the facility are less than 100 tons must have demonstrated compliance with this Part by May 15, 1991. Any offset lithographic printing process which was constructed on or before September 1, 1988 regardless of annual potential to emit must have demonstrated compliance with this Part by May 15, 1991.

(4) Any owner or operator of a packaging rotogravure, publication rotogravure, flexographic or offset lithographic printing process which was constructed after September 1, 1988 must have demonstrated compliance with this Part upon start-up.

(5) Any owner or operator of a screen printing process must:

(i) submit a compliance plan to the Department of Environmental Conservation by November 15, 1993 which contains a schedule of the steps necessary for the facility to achieve compliance with this Part and dates by which each step will be completed;

(ii) be in compliance with this Part by June 1, 1995; and

(iii) maintain the VOC control requirements included in any permit, compliance schedule, regulation, rule, administrative order, or any judicial order, until compliance with the provisions of this Part is demonstrated to the satisfaction of the commissioner.

(c) Any owner or operator of a packaging rotogravure, publication rotogravure, flexographic or offset lithographic printing process or screen printing process at any facility located in the Lower Orange County metropolitan area must comply with this Part according to the following schedule:

(1) Any owner or operator of a packaging rotogravure, publication rotogravure, or flexographic printing process at any facility which was constructed on or before May 10, 1981 and for which the annual potential to emit volatile organic compounds from all sources regardless of process type, but excluding combustion installations, at the facility equal or exceed 100 tons must have demonstrated compliance with this Part by July 1, 1982.

(2) Any owner or operator of a packaging rotogravure, publication rotogravure, or flexographic printing process at any facility which was constructed after May 10, 1981 and for which the annual potential to emit volatile organic compounds from all sources regardless of process type, but excluding combustion installations, at the facility equal or exceed 100 tons must have demonstrated compliance with this Part upon start-up.

(3) Any owner or operator of a packaging rotogravure, publication rotogravure, flexographic, offset lithographic printing process or screen printing process at any facility for which the annual potential to emit volatile organic compounds from all sources regardless of process type, but excluding combustion installations, at the facility equal or exceed 25 tons must:

(i) submit a compliance plan to the Department of Environmental Conservation by November 15, 1993 which contains a schedule of the steps necessary for the facility to achieve compliance with this Part or limit its annual potential to emit below the applicability criteria and the dates by which each step will be completed;

(ii) be in compliance with this Part or have had its permits modified to limit its annual potential to emit below the applicability criteria by June 1, 1995; and

(iii) maintain the VOC control requirements included in any permit, compliance schedule, regulation, rule, administrative order, or any judicial order, until compliance with the provisions of this Part is demonstrated to the satisfaction of the commissioner.

(4) Any owner or operator of a facility involving a packaging rotogravure, publication rotogravure, flexographic, offset lithographic printing process or screen printing process which is constructed after March 1, 1993 and which meets the current applicability criteria in paragraph (3) of this subdivision, must demonstrate compliance with this Part upon start-up.

(d) Any owner or operator of a packaging rotogravure, publication rotogravure, flexographic, offset lithographic printing process, or screen printing process at any facility located outside the New York City metropolitan area and Lower Orange County metropolitan area must comply with this Part according to the following schedule:

(1) Any owner or operator of a packaging rotogravure, publication rotogravure, or flexographic printing process which was installed on or before May 10, 1981 at any facility located in the counties of Albany, Cayuga, Columbia, Dutchess, Erie, Genesee, Greene, Livingston, Monroe, Niagara, Onondaga, Ontario, Orange (outside the Lower

Orange County metropolitan area), Orleans, Putnam, Rensselaer, Saratoga (limited to the towns of Clifton Park and Halfmoon, the city of Mechanicville, and the town and village of Waterford), Schenectady, Seneca, Ulster, Wayne, Wyoming, or Yates for which the annual potential to emit volatile organic compounds from all sources regardless of process type, but excluding combustion installations, at the facility equal or exceed 100 tons was to have demonstrated compliance with this Part by July 1, 1982.

(2) Any owner or operator of a packaging rotogravure, publication rotogravure, or flexographic printing process which was installed after May 10, 1981 at any facility for which the annual potential to emit volatile organic compounds from all sources regardless of process type, but excluding combustion installations, at the facility equal or exceed 100 tons must have demonstrated compliance with this Part upon start-up.

(3) Any owner or operator of a packaging rotogravure, publication rotogravure, flexographic, offset lithographic printing process, or screen printing process at any facility for which the annual potential to emit volatile organic compounds from all sources regardless of process type, but excluding combustion installations, at the facility equal or exceed 50 tons must:

(i) submit a compliance plan to the Department of Environmental Conservation by November 15, 1993 which contains a schedule of the steps necessary for the facility to achieve compliance with this Part or limit its annual potential to emit below the applicability criteria and the dates by which each step will be completed;

(ii) be in compliance with this Part or have had its permits modified to limit its annual potential to emit below the applicability criteria by June 1, 1995; and

(iii) maintain the VOC control requirements and compliance schedule included in any permit, regulation, rule, administrative order, or any judicial order, until compliance with the provisions of this Part is demonstrated to the satisfaction of the commissioner.

(4) Any owner or operator of a facility involving a packaging rotogravure, publication rotogravure, flexographic, offset lithographic printing process or screen printing process which is constructed after March 1, 1993 and which meets the current applicability criteria in paragraph (3) of this subdivision, must demonstrate compliance with this Part upon start-up.

(e) This Part previously contained a facility-wide emission reduction (bubble) plan involving processes covered by provisions of this Part. Any owner or operator of a facility which has operated in accordance with a facility-wide emission reduction plan approved by the commissioner must:

(1) submit a compliance plan to the Department of Environmental Conservation by November 15, 1993 which contains a schedule of the steps necessary for the facility to achieve compliance with this Part and the dates by which each step will be completed;

(2) be in compliance with this Part by June 1, 1995; and

(3) maintain the VOC control requirements and compliance schedule included in any permit, regulation, rule, administrative order, or any judicial order, until compliance with the provisions of this Part is demonstrated to the satisfaction of the commissioner.

(f) Graphic arts process which are not regulated under this Part must comply with all other applicable Parts of this Subchapter.

(g) Any printing process that is subject to the provisions of this Part, will remain subject to these provisions even if the emissions of volatile organic compounds from the facility later fall below the applicability criteria.

(h) This Part does not apply to:

(1) conductive inks which are applied at screen printing processes in the production of electronic circuits that permit electric current flow through the printed line or pattern;

(2) sterilization indicating inks which are applied at screen printing processes used to monitor the sterilization of medical instruments, autoclave efficiency, and the thermal processing of foods for the prevention of spoilage;

(3) inks which are applied by proof presses; or

(4) low-use specialty inks and/or coatings where the plantwide total annual usage is equal to or less than 55 gallons provided that:

(i) each specialty ink and/or coating must be approved by the commissioner's representative prior to application to a substrate;

(ii) records must be maintained on an as used basis in a format acceptable to the commissioner that document the annual usage; and

(iii) the facility's permits are modified to identify any coating(s) approved by the commissioner's representative which are exempt from this Part.

#### Historical Note

Sec. renum. 391.1, Title 9, filed Sept. 1971; new filed April 10, 1981; amds. filed: March 12, 1985; Aug. 15, 1988; repealed, new filed: March 5, 1993 eff. 30 days after filing; April 2, 1993 eff. April 4, 1993.

**234.2 Definitions.** (a) For the purpose of this Part, the general definitions of Part 200 of this Title apply.

(b) For the purpose of this Part, the following definitions also apply:

(1) *Annual*. Refers to a period of time based upon a calendar year commencing January 1st and terminating midnight December 31st.

(2) *Container*. Any portable device in which a material is stored, transported, or otherwise handled.

(3) *Capture system*. All the equipment including, but not limited to, hoods, ducts, fans, booths, ovens, or dryers that contain, collect, and transport an air pollutant to a control device.

(4) *Excluded VOC*. Any of the compounds expressly excluded from the definition of volatile organic compound (VOC) in section 200.1 of this Title.

(5) *Flexographic printing process*. Application of words, designs, and pictures to a substrate by means of a printing technique in which the image to be applied is raised above the nonimage area and the image carrier is made of a rubber or other elastomeric materials.

(6) *Fountain solution*. A solution of water, volatile organic compounds, gum arabic, and surfactants used for wetting lithographic press plates.

(7) *Graphic arts*. Packaging rotogravure, publication rotogravure, flexographic, offset lithographic, and screen printing processes.

(8) *Lower Orange County metropolitan area.* The area including the towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick and Woodbury.

(9) *Maximum permitted pounds of volatile organic compounds (VOC) per gallon of ink/coating or adhesive, minus water and excluded VOC, at application.* The permissible quantity volatile organic compounds per gallon of ink/coating or adhesive minus water and excluded VOC, at application as specified in section 234.3(c), table 1, of this Part. The actual VOC content of the as applied coating is calculated as follows:

$$(VOC)a = \frac{(Dc)a ( (Wv)a - (Ww)a - (We)a )}{1 - ( (Vw)a + (Ve)a )}$$

where:

(VOC)a = VOC content of "as applied" coating, expressed as a mass of VOC, in pounds, per volume of coating, in gallons, minus water and excluded VOC

(Dc)a = coating density as applied, in pounds per gallon

(Wv)a = the weight fraction of total volatiles in the coating, as applied

(Ww)a = the weight fraction of water in the coating, as applied

(Vw)a = the volume fraction of water in the coating, as applied

(We)a = the weight fraction excluded VOC in the coating, as applied

(Ve)a = the volume fraction of excluded VOC in the coating, as applied

(10) *New York City metropolitan area.* All of the city of New York, and Nassau, Suffolk, Westchester and Rockland Counties.

(11) *Nonreactive volatiles.* Any of the compounds expressly excluded from the definition of volatile organic compound (VOC) in section 200.1 of this Title.

(12) *Nonvolatile material.* The solid portion of ink as determined by an analytical method acceptable to the commissioner.

(13) *Offset lithographic printing process.* Application of words, designs and pictures to a substrate by means of planographic printing technique which involves the use of a lithographic plate, where the image and nonimage areas are chemically maintained from which the inked image is transferred to an intermediate surface called a blanket which in turn transfers the inked image to the substrate.

(14) *Packaging rotogravure printing process.* Rotogravure printing upon paper, paper board, metal foil, plastic film and other substrates which are, in subsequent operations, formed into either wallpaper or packaging products and labels for articles to be sold.

(15) *Potential to emit.* The maximum capacity of an air contamination source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restriction on the hours of operation, or type of material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in enforceable permit conditions. Fugitive emissions, to the extent that they are quantifiable, are included in determining the potential to emit.

(16) *Printing process.* The equipment used to apply words, pictures, or designs to either a continuous substrate (web), or a sheet. A continuous substrate consists of paper, plastic, or other material that is unwound from a roll, passed through ink or coating applicators and any associated drying areas. The press includes all ink and coating applicators and drying areas between unwind and rewind of the continuous substrate. A sheet consists of paper, plastic, or other material that is carried through

the process on a moving belt. The press includes all ink and coating applicators and drying operations between the time that the sheet is put on the moving belt until it is taken off.

(17) *Proof press.* A printing press used only to check the quality of print color and editorial content.

(18) *Publication rotogravure printing process.* Rotogravure printing which is subsequently formed into books, magazines, catalogs, brochures, directories, newspaper supplements and other types of printed materials.

(19) *Rotogravure printing process.* Application of words, designs, and pictures to a substrate by means of an intaglio printing operation in the inked image is transferred from minute etched or engraved wells on a plate or cylinder to the substrate which is supported by an impression roller.

(20) *Screen printing.* Application of words, designs, and pictures to a substrate by delivering ink through a tightly stretched fabric to which a refined form of stencil has been applied. The stencil and mesh openings determine the form and dimensions of the imprint. Excluded from this definition are inks/coatings or adhesives which are applied by a hand held squeegee. A hand held squeegee is one which is not propelled through the use of any mechanical conveyance and is not an integral part of the screen printing process.

(21) *Serigraph.* A term used by fine artists to denote the result of screen printing of original art. Also used to denote the fine arts reproduction phase of screen printing industry.

(22) *Solvent.* A substance that is liquid at standard conditions and is used to dissolve or dilute another substance; this term includes, but is not limited to, organic materials used as solvents, viscosity reducers, degreasing agents, or cleaning agents. Any excluded VOC is not a solvent.

#### Historical Note

Sec. amd. filed Oct. 27, 1981; renum. 391.2, Title 9, filed Sept. 1971; new filed April 10, 1981; amds. filed: March 12, 1985; Aug. 15, 1988; March 5, 1993 eff. 30 days after filing; April 2, 1993 eff. April 4, 1993.

**234.3 Control requirements.** (a) Any owner or operator of a packaging rotogravure, publication rotogravure, or flexographic printing process subject to this Part, and employing ink containing volatile organic compounds, shall not operate, cause, allow or permit the operation of such process unless the process meets one of the following control strategies:

(1) the volatile fraction of ink, as it is applied to the substrate, contains 25.0 percent by volume or less of volatile organic compounds and 75.0 percent by volume or more of nonreactive volatiles. Compliance is determined as follows:

(i) calculate the volume fraction volatile organic compounds of ink:

$$(V_v)_a = 1 - ((V_w)_a + (V_e)_a + (V_n)_a)$$

where,

(V<sub>v</sub>)<sub>a</sub> = Volume fraction VOC of ink (minus water and excluded VOC), as applied

(V<sub>w</sub>)<sub>a</sub> = Volume fraction water of ink, as applied

(V<sub>e</sub>)<sub>a</sub> = Volume fraction excluded VOC of ink, as applied

(V<sub>n</sub>)<sub>a</sub> = Volume fraction solids of ink, as applied

(ii) determine the maximum volume fraction of volatile organic compounds (VOC) in a complying ink:

$$.25 ( (Vw)a + (Ve)a + (Vv)a ) = Vvm$$

where,

$(Vw)a$  = Volume fraction water of ink, as applied

$(Ve)a$  = Volume fraction excluded VOC of ink, as applied

$(Vv)a$  = Volume fraction VOC of ink (minus water and excluded VOC), as applied

$Vvm$  = Maximum volume fraction VOC in the complying ink

(iii) compare the maximum volume fraction VOC in the complying ink to the volume fraction VOC in the actual ink:

$(Vv)a < Vvm$  indicates compliance

(2) the ink as it is applied to the substrate, less nonreactive volatiles, contains 60.0 percent by volume or more nonvolatile material. Compliance is determined as follows:

(i) calculate the volume fraction volatile organic compounds in the ink:

$$(Vv)a = 1 - ( (Vw)a + (Ve)a + (Vn)a )$$

where,

$(Vv)a$  = Volume fraction VOC of ink (minus water and excluded VOC), as applied

$(Vw)a$  = Volume fraction water of ink, as applied

$(Ve)a$  = Volume fraction excluded VOC of ink, as applied

$(Vn)a$  = Volume fraction solids of ink, as applied

(ii) calculate the volume fraction nonvolatile material (solids) minus nonreactive volatiles:

$$(Vnv)a = (Vn)a / ( (Vn)a + (Vv)a )$$

where,

$(Vnv)a$  = Volume fraction nonvolatile material minus nonreactive volatiles

(iii) if the volume fraction of nonvolatile material minus nonreactive volatiles  $(Vnv)a$  is equal to or greater than .6, compliance is shown; or

(3) the capture system and the air cleaning device must provide for an overall reduction in volatile organic compound emissions of at least:

(i) 75.0 percent where a publication rotogravure process is employed;

(ii) 65.0 percent where a packaging rotogravure process is employed;

(iii) 60.0 percent where a flexographic printing process is employed; or

(iv) the overall removal efficiency is determined by testing the capture efficiency and the removal efficiency of the control equipment, utilizing test methods acceptable to the commissioner.

(b) Any owner or operator of an offset lithographic printing process subject to this Part and employing fountain solutions containing volatile organic compounds shall not operate, cause, allow or permit the operation of such process unless:

(1) the fountain solution contains 15 percent by weight or less of volatile organic compounds for sources in operation before September 1, 1988;

(2) the fountain solution contains 10 percent by weight or less of volatile organic compounds for sources in operation on or after September 1, 1988; or

(3) an air cleaning device shall provide for a reduction in VOC emissions from the dryer exhaust of at least 90 percent.

(c) Any owner or operator of a screen printing process subject to this Part, shall not operate, cause, allow or permit the usage of inks/coatings or adhesives that exceed the maximum permitted pounds of volatile organic compounds per gallon, minus water and excluded VOC, at application as specified in table 1, unless control equipment meeting the requirements of subdivision (d) of this section is installed and operated.

Table 1

<i>Product or substrate</i>	<i>Maximum permitted pounds of volatile organic compounds per gallon (minus water and excluded VOC) of ink/coating or adhesive at application</i>
Paper	3.3
Glass	3.3
Metal	3.3
Plastic/vinyl	3.3
Reflective sheeting	3.3
Textile/imprinted garments	3.3
Serigraph/fine arts	5.0
Pressure sensitive decals	3.3
Plywood/wood	3.3

(d) Any owner or operator of a screen printing process subject to this Part, which utilizes emission control equipment to comply with the VOC limits specified in subdivision (c) of this section, table 1, must design and operate such control equipment to provide, at a minimum, for an 80 percent overall removal efficiency of volatile organic compounds. The overall removal efficiency is the total reduction in volatile organic compound emissions considering the efficiency of both the capture system and of the subsequent destruction and/or removal of these air contaminants by the control equipment prior to their release to the atmosphere.

(e) No person shall cause or allow emissions to the outdoor atmosphere having an average opacity of 10 percent or greater for any consecutive six-minute period from any emission source subject to this Part.

(f) (1) The commissioner may allow printing processes to operate with a lesser degree of control than is required by this section provided that a process specific reasonably available control technology (RACT) demonstration has been made to the satisfaction of the commissioner. Process specific RACT demonstrations shall be submitted with the application for a permit to construct, a certificate to operate, or renewal of a certificate to operate for an existing source under the provisions of Part 201 of this Title. Such process specific RACT demonstrations must be submitted to the United States Environmental Protection Agency as a revision to the State Implementation Plan and must address the technical and economic feasibility of:

(i) utilizing compliant inks and/or coatings;

(ii) utilizing demonstrated and proven emission control technologies which would achieve the required overall removal efficiency as determined per this section;

(iii) utilizing demonstrated and proven emission control technologies which would achieve a degree of overall removal efficiency less than required as determined per this section; and



(iv) utilizing demonstrated and proven production modifications methods which would result in real, documented, and enforceable reductions in the volatile organic compound emissions from the process.

(2) Facilities with printing processes subject to this Part with annual potential to emit of less than five tons of volatile organic compounds will only be required to comply with subparagraphs (1)(i) and (1)(iv) of this subdivision in order to demonstrate that a lesser degree of control is RACT for these processes.

(3) The commissioner may allow sources which use natural gas fired afterburners as control devices for processes subject to this Part, to shut down these natural gas fired afterburners from November 1st through March 31st for the purposes of natural gas conservation, provided that the commissioner has determined that this action will not jeopardize air quality. Such evidence shall be submitted with the application for a permit to construct, a certificate to operate, or renewal of a certificate to operate for an existing source under the provisions of Part 201 of this Title.

#### Historical Note

Sec. amds. filed: July 16, 1964; July 22, 1966; renum. 391.3, Title 9, filed Sept. 1971; new filed April 10, 1981; amds. filed: March 12, 1985; Aug. 15, 1988; March 5, 1993 eff. 30 days after filing; April 2, 1993 eff. April 4, 1993.

**234.4 Testing, monitoring and recordkeeping.** (a) When a printing process utilizes control equipment to comply with the provisions of this Part, test methods acceptable to the Department of Environmental Conservation must be used when demonstrating the overall removal efficiency.

(1) This demonstration may be performed by directly measuring VOC/solvent recovery and VOC/solvent usage rates where VOC/solvent recovery is the only control technique. Methods described in section 234.5(b)(1) and (b)(2) of this Part must be used.

(2) For control equipment other than VOC/solvent recovery, this demonstration must include provisions to determine both the efficiency of the capture system and of the subsequent destruction and/or removal of these air contaminants by control equipment prior to their release to the atmosphere.

(b) (1) The owner or operator must follow notification requirements, protocol requirements and test procedures of Part 202 of this Title for testing and monitoring. Depending upon the conditions at a test site, one of the following test methods from Appendix A of 40 CFR 60 (see table 1, section 200.9 of this Title) must be used when measuring volatile organic compound (VOC) concentrations of a gas stream at the inlet and outlet of a control device to determine the destruction and/or removal efficiency:

(i) Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography.

(ii) Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon.

(iii) Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer.

(iv) Methods not listed above must be approved in advance by the commissioner's representative and the United States Environmental Protection Agency.

(2) Acceptable analytical methods for determining the volatile content, water content, density, volume of solids and weight of solids of surface coatings and printing inks are presented in Appendix A, methods 24 and 24A respectively, of 40 CFR 60. Alternate analytical methods for surface coating and printing ink analysis must be

approved by the commissioner and the United States Environmental Protection Agency. Instead of an ink solvent/volatile analysis, the commissioner may accept certification from the ink manufacturer of the composition of the ink solvent/volatiles, if supported by actual batch records.

(3) Purchase, usage and/or production records of inks, VOC, and solvents must be maintained in a format acceptable to the commissioner's representative, and upon request, these records must be submitted to the department's representative. In addition, any other information required to determine compliance with this Part must be provided to the commissioner's representative in a format acceptable to him. Records must be maintained at the facility for a period of five years.

(4) The results of any analysis or other procedure used for establishing compliance with this Part must be provided to the commissioner's representative. Representatives of the Department of Environmental Conservation shall be permitted, during reasonable business hours, to obtain ink and/or fountain solution samples for the purpose of determining compliance with this Part.

(5) Any graphic arts facility which is not subject to the control requirements of this Part because its annual potential to emit volatile organic compounds are below the applicability criteria, must maintain records in a format acceptable to the commissioner's representative that verify the facility's annual potential to emit VOC. Upon request, these records must be submitted to the department.

(c) If an air cleaning device is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:

- (1) exhaust gas temperature of all incinerators;
- (2) temperature rise across catalytic incinerator bed;
- (3) breakthrough of volatile organic compounds on a carbon adsorption unit; and
- (4) any other continuous monitoring or recording device required by the commissioner.

#### Historical Note

Sec. renum. 391.4, Title 9, filed Sept. 1971; new filed April 10, 1981; amds. filed: March 7, 1983; Aug. 15, 1988; repealed, new added by renum. and amd. 234.5, filed: March 5, 1993 eff. 30 days after filing; April 2, 1993 eff. April 4, 1993.

**234.5 Prohibition of sale or specification.** (a) No person shall sell, specify, or require for use, the application of a coating or ink on a substrate at a facility with a printing process subject to the volatile organic compound control requirements of section 234.3 of this Part if such use is prohibited by any of the provisions of this Part. The prohibition of this section shall apply to all written or oral contracts under the terms of which any coating or ink is to be applied to any substrate at an affected facility. This prohibition shall not apply to the following:

- (1) coatings and/or inks utilized at printing processes where control equipment has been installed to demonstrate compliance with this Part; or
- (2) coatings and/or inks utilized at printing processes that have been granted variances for reasons of technological and economic feasibility per section 234.3(f) of this Part.

(b) Any person selling a coating or ink for use at a printing process subject to this Part must, upon request, provide the user with certification of the volatile organic compound content of the coating or ink supplied.

#### Historical Note

Sec. renum. 391.5, Title 9, filed Sept. 1971; new filed April 10, 1981; amds. filed: March 7, 1983; Nov. 5, 1984; March 12, 1985; Aug. 15, 1988; renum. 234.4, new added by renum. and amd. 234.6, filed: March 5, 1993 eff. 30 days after filing; April 2, 1993 eff. April 4, 1993.

**234.6 Handling, storage and disposal of volatile organic compounds (VOC).** No owner or operator of a facility subject to this Part shall:

- (a) use open containers to store or dispose of cloth or paper impregnated with VOC and/or solvents that are used for surface preparation, cleanup or ink/coating removal;
- (b) store in open containers spent or fresh VOC and/or solvents to be used for surface preparation, cleanup or ink/coating removal;
- (c) use open containers to store or dispose of inks and/or surface coatings; or
- (d) use open containers to store or dispense inks and/or surface coating unless production, sampling, maintenance or inspection procedures require operational access. This provision does not apply to the actual device or equipment designed for the purposes of applying an ink or coating to a substrate.

**Historical Note**

Sec. filed Aug. 15, 1988; renum. 234.5, new filed: March 5, 1993 eff. 30 days after filing: April 2, 1993 eff. April 4, 1993.